

REMARKS

In order to expedite the prosecution of the present application, the subject matters of the originally presented claims 1 and 2 have been combined and re-presented as newly added claim 18. Accordingly, claims 1 and 2 have been canceled and relevant claims amended to reflect newly presented claim 18. Additionally, grammatical and idiomatic errors have been corrected in the claims. No new matter has been added. Claims 1-7, 10 and 13-15 have been provisionally rejected on the ground of non-statutory obviousness-type double patenting over claims 1-18 of co-pending application Serial No. 10/480 841. Applicants will deal with this rejection in either co-pending application Serial No. 10/480 841 or the present application has been indicated as being allowable.

Claims 8, 9, 11, 12, 16 and 17 have been provisionally rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over claims 1-18 of co-pending application Serial No. 10/480 841 in view of Bittner et al. Like the previously discussed obviousness-type double patenting rejection, Applicants will address this rejection once co-pending application Serial No. 10/480 841 has been allowed where the present application has been deemed allowable.

Claims 1, 3, 5 and 7 have been rejected under 35 USC §102(d) as being anticipated by Rossmair. Claims 1-7, 10, 14 and 15 have been rejected under 35 USC §102(c) as being anticipated by Nakayama et al. Claims 16 and 17 have been rejected under 35 USC §103(a) as being unpatentable over Nakayama et al. Claims 1-5, 7, 10 and 14-16 have been rejected under 35 USC §103(a) as being unpatentable over Kogure. Claim 6 has been rejected under 35 USC §103(a) as being unpatentable over Kogure in view of Frelin et al. Claim 13 has been rejected under 35 USC §103(a) as being unpatentable over Kogure in view of Frelin et al. and further in view of Bartik-Himmler et al. Claims 8, 9, 11, 12 and 17

have been rejected under 35 USC §103(a) as being unpatentable over Kogure in view of Bittner et al. Applicants respectfully traverse these grounds of rejection and urge reconsideration in light of the following comments.

The currently claimed invention is directed to an aqueous surface and a treating solution capable of treating independently or collectively at least one metal material selected from the group consisting of a ferriferous material, a zinciferous material, an aluminiferous material and a magneziferous material. The treating solution contains 5 to 5000 ppm of a zirconium compound, calculated as metal zirconium, 0.1 to 100 ppm of free fluorine ion, at least one compound selected from the group consisting of 5 to 100 ppm of a calcium compound, calculated as metal calcium, and 10 to 5000 ppm of a strontium compound, calculated as metal strontium, and having a pH of 2 to 6. The present invention also is directed to a method for surface treatment using the inventive surface-treating solution and a metal material which is treated by the inventive surface-treating solution. The present invention is directed to a surface-treating solution which can form a surface-treated film having an excellent corrosion resistance on the surface of a ferriferous material, zinciferous material, aluminiferous material and a magneziferous material, either individually or collectively, does not contain a harmful component to the environment and does not generate a sludge to be disposed of. Moreover, since the present invention does not require the surface conditioning of the metal material to be treated, it allows the shortening of the treatment time and the reduction of space for the treatment. It is respectfully submitted that the prior art cited by the Examiner does not disclose the presently claimed invention.

Rossmailer reference discloses an aqueous acid treatment solution containing an alkylamine oxide or an alkylammonium salt with an alkyl radical having from 8 to 22 carbon atoms, the hydroxycarboxylic acid, complex fluorides and mineral

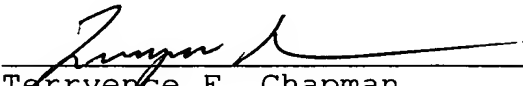
acids and, preferably, tannin. However, this reference does not disclose the presence of at least one compound selected from the group consisting of the calcium compound and strontium compound. Therefore, the currently claimed invention is clearly patentably distinguishable with this reference.

Nakayama et al., U.S. Patent Publication No. 2004/0244874 has been cited by the Examiner as disclosing a metal surface treatment solution that is substantially the same as the presently claimed invention. However, the current claims exclude magnesium therefrom. As such, it respectfully submitted the presently claimed invention clearly is patentably distinguishable over this reference.

None of the remaining references cited by the Examiner are as close in disclosing the present invention as the references discussed previously. That is, none of the references disclosed a metal-treating solution which is capable of treating either individually or collectively a ferriferous material, a zinciferous material, an aluminiferous material and a magnesiferous material with a treating solution containing the claimed components. The examples in the present specification discloses that immersing a test plate made of three different metal material being spot-welded in a treating solution of the present invention results in the formation of a uniform film over every metal material, simultaneously forming a surface-treated film over the spot-welded portion. This is clearly unexpected in light of the prior art cited by the Examiner and is more than sufficient to rebut the showing of prima facie obviousness over Kogure, Kogure in view of Frelin and Kogure in view of Frelin and further in view of Bartik-Himmler et al. and Kogure in view of Bittner et al.

Reconsideration of the present application and the
passage and the issuance is respectfully solicited.

Respectfully submitted,


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